

Alaska Energy Authority & Denali Commission

Emerging Energy Technology Fund Progress Report

Grant Number 7310051

Project title: Wind Diesel Battery Hybrid for Kwigillingok

Grantee: Intelligent Energy Systems

Reporting Period: 4th October 1 2013 to December 31 2013

Deliverables Submitted: The following Deliverables are in progress:

- Site instrumentation Plan is in final review prior to AEA submission.
- Site agreement has been submitted to the Kwigillingok Tribal Council for approval at the end of the year meeting.
- Economic analysis and the system modeling have been initiated and are awaiting the data from the commissioned system. Base line data from the powerhouse is being collected.

Budget: The project remains completable under existing grant funds. Revised budget category totals and milestones to be submitted for review and approval.

Schedule Status: The Schedule has been driven by the weather this fall. Unseasonable warm temperatures coupled with large Hurricane rain events resulting in flooding made moving the shelter and construction not possible. The current schedule plans for foundation construction and shelter Commissioning taking place in the 1st Quarter of 2014.

Percent Complete: 65%

Milestone	Task		Deliverables	Status
	1	Complete site design	System one-line, site agreement, installation narrative, instrumentation plan	90% Complete
	2	Procure battery and inverter		100% Complete
	3	Install instrumentation and collect baseline data		In progress
	4	Economic analysis	Economic analysis	In progress
	5	System modeling	Modeling summary report	In progress
	6	Factory acceptance testing	Acceptance test results	100% complete
	7	Procure remaining equipment		90% complete
	8	Deliver materials to site		90% complete

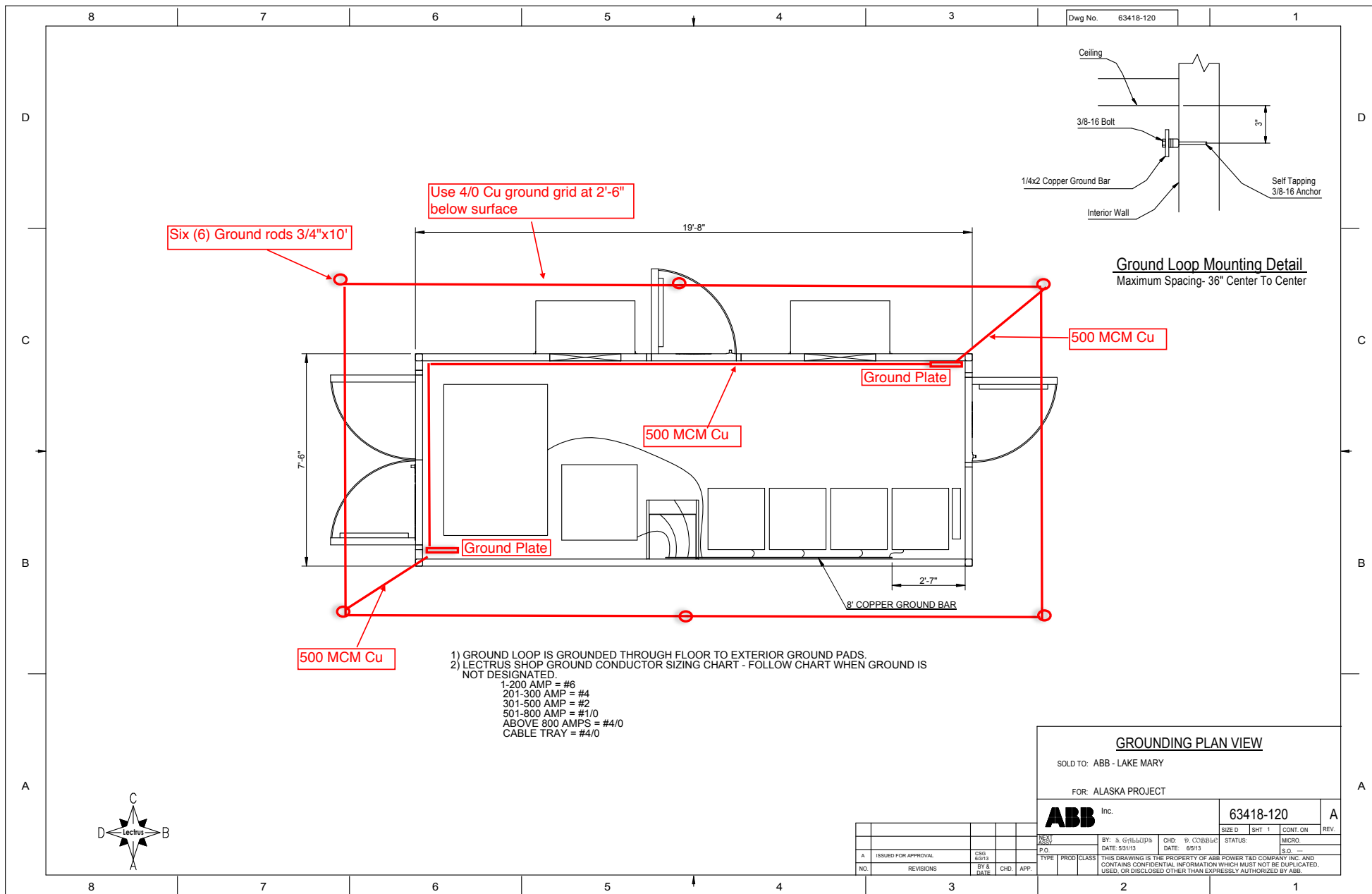
	9	Installation and commissioning	Commissioning report	10% complete
	10	Long term monitoring		
	11	Data evaluation and draft project report	Draft project report	
	12	Final project report	Final report	

Work Progress: In spite of the unfavorable conditions, the following site work occurred:

- The shelter's foundation consisting of tundra mats were positioned.
- The grounding counter poise was installed per spec of the DRW 63418-120 Rev A. (Appendix A)
- Additional materials arrived on site, including the fiber optic cable for Shelter to Power House Communications.
- The Battery Shelter and trailer have been moved from the Barge landing to higher ground up the "road" in Kwigillingok for storage until freeze up and transport to the site is possible. (Appendix B)

Future work: Final Installation and Commissioning of the Battery module is scheduled for 1st Quarter of 2014. We have set a date of 3/17 for the start of the commissioning. Installation of the Battery Shelter is scheduled for January weather permitting.

Appendix A – Drawing



Appendix B – Photo Log



Barge landing BESS Unit Kwigillingok 10/11/2013



Barge landing trailer foundation Kwigillingok 10/11/2013



Counter Poise Installation 10/19/2013



Counter Poise installation 10/19/2013



Site mats positioned



Site mats and grounding Loop Leads 10/27/2013



Storm debris clean up 10/25/2013



Battery Shelter and trailer located up the road awaiting freeze up 10/24/2013